

## COMMONWEALTH OF MASSACHUSETTS

# OPERATIONAL SERVICES DIVISION - ROOM 1017 JOHN McCORMACK STATE OFFICE BUILDING ONE ASHBURTON PLACE BOSTON, MA 02108-1552

# REQUEST FOR RESPONSE (RFR)

### RFR#GRO16

### **FOR**

# CLEANING PRODUCTS, ENVIRONMENTALLY PREFERABLE (REDUCED HEALTH AND ENVIRONMENTAL IMPACTS)

### **CONTACT PERSONS**:

For General Questions:

Tasha Coleman
Procurement Team Leader
For Food and Groceries
Telephone: (617) 720-3128
Fax: (617) 727-4527

E-Mail: Tasha.Coleman@osd.state.ma.us

For Environmental Questions:

Marcia Deegler Environmental Purchasing Program Manager (617) 720-3356 (617) 727-4527 Marcia.Deegler@osd.state.ma.us

# **Table of Contents**

		PAGE
<b>Procurement</b>	Calendar / Bidders Conference	3
<b>General Inform</b>	nation	
Section I	Purpose of Procurement	8
Section II	Duration of Contract/ Number of Awards	9
Section III	Eligible Entities	9
Section IV	Estimated Value of Procurement	9
Section V	Definitions	10
Section VI	Product Applications	11
Section VII	Mandatory Health/Environmental Specifications (Categories 1-3)	12
Section VIII	Mandatory/Health/Env. Specifications (Categories 4-5)	17
Section IX	Mandatory/Desirable Health/Env. Specifications (Categories 6-7)	
Section X	Mandatory/Desirable Non-Formulation Specifications (Categories 1-7)	19
Section XI	Product Specific Performance Requirements	22
Section XII	Pricing	
Section XIII	Evaluation Criteria and Process	
Section XIV	Changes / Clarifications	24
Section XV	Bidder Qualifications	
Section XVI	Instructions to Bidders	26
Section XVII	Instructions for Submission of Responses	27
ATTACI INJENITO	·	
ATTACHMENTS		20
	Bidder Cover Sheet and Product Information	
	Mandatory Product Specifications Checklist	
	Desirable Product Specifications Checklist	
	Bidder Certification Letter	
	Bidder Qualifications	
	Training Information	
	Packaging Information	
	Additional Information / Asthmagens	
	Price Sheet	
	Business Reference Form	
Attachment K	Optional Paper / Textile Products Form	38
APPENDIX I		
	nent and Consensus Process	30
G3-37 Developi	Herit and Consensus Frocess	37
APENDIX II		
	luation of Toxicity data	40
	······································	
APPENDIX III		
Internet Links to	o data referenced in the RFR	41

#### PROCUREMENT CALENDAR

#### ALL RESPONSES ARE DUE BY OCTOBER 22, 2002, 3:00PM.

LATE RESPONSES WILL NOT BE ACCEPTED UNDER ANY CIRCUMSTANCES.

EVENT DATE TIME

Announcement of RFR on Comm-PASS June 18, 2002

Release of Request for Response (RFR)

Informational Bidder's Conference (see below)

Deadline for Written Inquiries

Response to Written Inquiries (estimated)

Response Due Date and Time

September 17, 2002

1:00PM

October 1, 2002

3:00PM

October 8, 2002 3:00PM

October 22, 2002

3:00PM

Completion of Phase I Evaluation (estimated)

November 20, 2002

Phase I Preliminary Award (estimated) November 21, 2002

Performance Testing Period November 21, 2002 Completion of Phase II Performance Evaluation (estimated) November 27, 2002

Execution of Contract December 2, 2002

Final Contract Award (estimated) December 2, 2002

The Informational Bidder's Conference is scheduled to be held on:

Tuesday, October 1, 2002 1:00PM – 3:00PM

John McCormack State Building 1 Ashburton Place Room 1017 Boston, MA

All Bidders are strongly urged to attend this Bidder's Conference

R.S.V.P. by calling Tasha Coleman, at 617-720-3128

Written questions from Bidders will be permitted and should be submitted at the Bidders Conference or by email or regular postal mail, **Friday, October 4, 2002, 3:00PM**, to the attention of Tasha Coleman, OSD, One Ashburton Pl. Room 1017, Boston, MA 02108 or by fax to 617-727-4527.

#### **GENERAL RFR INFORMATION**

Procuring Department: Operational Services Division
Address: 1 Ashburton Place, Room 1017

Telephone #: 617-720-3128

Fax #: 617-727-4527

E-Mail: tasha.coleman@osd.state.ma.us
RFR File Name/Title: Cleaning Products, Environmentally Preferable

RFR File Number: GRO16

RFR Contact Person: Tasha Coleman, Procurement Team Leader

Procurement Category: Food & Groceries

# COMMONWEALTH OF MASSACHUSETTS OPERATIONAL SERVICES DIVISION REQUEST FOR RESPONSE

# Cleaning Products, Environmentally Preferable (Reduced Health and Environmental Impacts)

## **General Information**

The terms 801 CMR 21.00: Procurement of Commodities and Services (and 808 CMR 1.00: Compliance Reporting and Auditing for Human and Social Services if applicable) are incorporated by reference into this RFR. Words used in this RFR shall have the meanings defined in 801 CMR 21.00 (and 808 CMR 1.00, if applicable). Additional definitions may also be identified in this RFR. Unless otherwise specified in this RFR, all communications, responses, and documentation **must** be in English, all measurements **must** be provided in feet, inches, and pounds and all cost proposals or figures in U.S. currency. All responses **must** be submitted in accordance with the specific terms of this RFR. No electronic responses may be submitted in response to this RFR.

#### **General Definitions**

Added Value: The non-required features of a response that add value for the Commonwealth within a proposal.

<u>Best Value:</u> The purchasing of commodities and/or services by the state based on common sense and sound procurement principles including performance, economic value and flexibility.

<u>Contractor:</u> A successful bidder. The business that is awarded a contract based on the quality of their response and their ability to offer the Commonwealth the Best Value.

<u>Environmentally Preferable</u>: A product or service that has a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. Such products or services may include, but are not limited to, those which contain recycled content, minimize waste, conserve energy or water, and reduce the amount of toxics either disposed of or consumed.

<u>Mandatory Specification:</u> A mandatory specification **MUST** be met in order for a proposal to be considered responsive. These are denoted throughout this RFR as "**must,"** "**will,"** "**expected,"** or "**required."** Any proposal that fails to meet a mandatory specification of this RFR will be found non-responsive without further evaluation unless the evaluation team, in its discretion, determines that the non-compliance is insubstantial and can be corrected, or that an alternative proposed by the bidder is acceptable.

<u>Procurement Management Team (PMT):</u> PMT's are comprised of individuals from various state departments who have a vested interest in developing solicitations and managing contracts for specified goods and services.

<u>Procurement Team Leader (PTL):</u> A management professional residing at either Operational Services Division (OSD) or state departments, who lead Procurement Management Teams.

Request for Response (RFR): Information about commodities and/or services that a department wishes to buy. The RFR specifies the type of response requested. The RFR may also be referred to as a "solicitation."

Response: A response from a business to a RFR. Responses may also be referred to as "bids," "quotes," or "proposals."

<u>Statewide Contract</u>: A contract procured on behalf of all departments for specified commodities, services or both which may be used by any state department, or other authorized governmental or public entities.

Additional glossary definitions can be found under User Tips on the Comm-PASS home page @ www.Comm-PASS.com and in 801 CMR 21.00.

<u>Emergency Standby Commodities and/or Services.</u> Due to a declaration of a state of emergency where the safety and well being of Commonwealth citizens are at risk, the Commonwealth of Massachusetts may request specific commodities and/or services from its Contractors. Contractors may be called upon to supply and/or deliver to the Commonwealth on a priority basis such commodities and/or services currently under contract.

Such accommodations may be requested from a Contractor during an actual emergency. To accommodate such requests, Contractors may be requested and **must** make every effort to service these requests to the best of their ability from regular sources of supply at the rates set forth in any standard contract resulting from this RFR.

<u>Bidder Communication</u>. Bidders are prohibited from communicating directly with any employee of the procuring department except as specified in this RFR, and no other individual Commonwealth employee or representative is authorized to provide any information or respond to any question or inquiry concerning this RFR. Bidders may contact the contact person for this RFR in the event this RFR is incomplete or the bidder is having trouble obtaining any required attachments electronically through Comm-PASS.

Reasonable Accommodation. Bidders with disabilities or hardships that seek reasonable accommodation, which may include the receipt of RFR information in an alternative format, must communicate such requests in writing to the contact person. Requests for accommodation will be addressed on a case by case basis. A bidder requesting accommodation must submit a written statement, which describes the bidder's disability and the requested accommodation to the contact person for the RFR. The PMT reserves the right to reject unreasonable requests.

<u>Prompt Pay Discount.</u> Bidders are strongly encouraged to offer discounts in exchange for an expedited payment. Payments may be issued earlier than the general goal of within 30 days of receipt of the invoice only when in exchange for discounted prices. Payment periods listed in a Contract of less than forty-five (45) days from the date of receipt of an invoice shall be effective only to enable a department to take advantage of early payment incentives and shall not subject any payment made within the forty-five (45) day period to a penalty.

<u>Public Records.</u> All responses and information submitted in response to this RFR are subject to the Massachusetts Public Records Law, M.G.L., Chapter 66, Section 10, and to Chapter 4, Section 7, Subsection 26. Any statements in submitted responses that are inconsistent with these statutes shall be disregarded.

The Commonwealth makes **no guarantee that any Commodities or Services will be purchased** from any Contract resulting from this RFR. Any estimates or past procurement volumes referenced in this RFR are included only for the convenience of Bidders, and are not to be relied upon as any indication of future purchase levels.

**Best Value Selection and Negotiation.** The PMT may select the response(s) which demonstrates the best value overall, including proposed alternatives, that will achieve the procurement goals of the department. The PMT and a selected bidder, or a contractor, may negotiate a change in any element of contract performance or cost identified in the original RFR or the selected bidder's or contractor's response which results in lower costs or a more cost effective or better value than was presented in the selected bidder's or contractor's original response.

<u>Costs.</u> Costs which are not specifically identified in the bidder's response, and accepted by a department as part of a contract, will not be compensated under any contract awarded pursuant to this RFR. The Commonwealth will not be responsible for any costs or expenses incurred by bidders responding to this RFR.

Comm-PASS. This RFR has been distributed electronically using the Comm-PASS system, RFR attachments that are referenced are available either as separate .pdf files with this RFR or in the Comm-PASS Forms and Information section: www.comm-pass.com. Bidders are solely responsible for obtaining and completing the required attachments that are identified in this RFR and for checking Comm-PASS for any addenda or modifications that are subsequently made to this RFR or attachments. The Commonwealth and its subdivisions accept no liability and will provide no accommodation to bidders who fail to check for amended RFRs and submit inadequate or incorrect responses. Bidders are advised to check the "last change" field on the summary page of RFRs for which they intend to submit a response to ensure that they have the most recent RFR files. Bidders may not alter (manually or electronically) the RFR language or any RFR component files. Modifications to the body of the RFR, specifications, terms and conditions, or which change the intent of this RFR are prohibited and may disqualify a response.

Northern Ireland Notice and Certification. All bidders must complete the Northern Ireland Notice and Certification form to satisfy M.G.L. c.7 section 22C, which states that no state agency may procure commodities or services from any bidder employing ten (10) or more employees in an office or other facility located in Northern Ireland unless the bidder certifies through the notice and certification form that if it employs ten or more employees in Northern Ireland, a) the bidder does not discriminate in employment, compensation or the terms, conditions and privileges of employment on account of religious or political belief, b) the bidder promotes religious tolerance within the workplace and the eradication of any manifestations of religious and other illegal discrimination and, c) the

bidder is not engaged in the manufacture, distribution or sale of firearms, munitions, including rubber or plastic bullets, tear gas, armored vehicles or military aircraft for use or deployment in any activity in Northern Ireland.

<u>Subcontracting Policies.</u> Prior approval of the department is required for any subcontracted service of the contract. Contractors are responsible for the satisfactory performance and adequate oversight of its subcontractors. Subcontractors are required to meet the same state and federal financial and program reporting requirements and are held to the same reimbursable cost standards as contractors.

<u>Affirmative Market Program.</u> Massachusetts Executive Order 390 established a policy to promote the award of state contracts in a manner that develops and strengthens Minority and Women Business Enterprises (M/WBEs). As a result, M/WBEs are strongly encouraged to submit responses to this RFR, either as prime contractors, as joint venture partners, or as subcontractors.

Non-M/WBE bidders are strongly encouraged to develop creative initiatives to help foster *new business relationships* with M/WBEs within the primary industries affected by this RFR. In order to satisfy this section, the bidder **must** submit: the names, addresses, phone numbers and contact persons of each M/WBE firm; a description of each business relationship to be established; and the actual dollar amounts, or percentages, to be awarded to each M/WBE firm. MBE and WBE firms **must** submit a copy of their SOMWBA certification letter for the current period. A directory of SOMWBA certified firms is available via the Internet at www.state.ma.us/somwba.

A Minority Business Enterprise (MBE) or a Woman Business Enterprises (WBE) is defined as a business that has been certified as such by the State Office of Minority and Women Business Assistance (SOMWBA). Minority and women-owned firms that are not currently SOMWBA-certified but would like to be considered as an M/WBE for this RFR should apply for certification. A fast track application is available, and will be considered for the purposes of this RFR. For further information on SOMWBA certification contact the State Office of Minority and Women Business Assistance at (617) 727-8692 or via the Internet at www.state.ma.us/somwba.

**Brand Name or Equal.** Unless otherwise specified in this RFR, any reference to a particular trademark, trade name, patent, design, type, specification, producer or supplier is not intended to restrict this RFR to any manufacturer or proprietor or to constitute an endorsement of any commodity or service, and the department may consider clearly identified offers of substantially equivalent commodities and services submitted in response to such reference.

Alternatives. A response which fails to meet any material term or condition of the RFR, including the submission of required attachments, may lose points or be deemed unresponsive and disqualified. Unless otherwise specified, bidders may submit responses proposing alternatives which provide equivalent, better or more cost-effective performance than achievable under the stated RFR specifications. These alternatives may include related commodities or services that may be available to enhance performance during the period of the contract. The response should describe how any alternative achieves substantially equivalent or better performance to that of the RFR specifications.

The department will determine if a proposed alternative method of performance achieves substantially equivalent or better performance. The goal of this RFR is to provide the best value of commodities and services to achieve the procurement goals of the department. Bidders that propose discounts, uncharged commodities and services or other benefits in addition to the RFR specifications may receive a preference or additional points under this RFR as specified.

Contractors may also propose alternatives for equivalent, better or more cost-effective performance than specified under the Contractor's original response to enable the department to take advantage of enhanced technologies, commodities or services which become available during the term of the contract.

<u>Environmentally Preferable Products and Services.</u> The department and contractor (s) may negotiate during the contract term to permit the substitution or addition of Environmentally Preferable Products (EPPs) when such products are readily available at a competitive cost and satisfy the departments performance needs.

<u>Electronic Commerce</u>. The Commonwealth of Massachusetts intends to support electronic commerce through an open-architecture eMarketplace. As such, successful bidders may be required to participate in the Multi-State EMall<sup>™</sup> procurement system which will be integrated into the current accounting system. Bidders should establish and maintain a World Wide Web site for corporate information, product literature, product alert notifications,

introduction of new products, product ordering and industry Web links in order to be prepared for EMall implementation. By submitting a response to this RFR, bidders agree that, in the event of EMall implementation and upon at least 120 days notice, they will participate as directed by the PMT to successfully activate and maintain a contract- and EMall-compliant catalog in the system. More information is available at <a href="http://www.emall.isa.us">http://www.emall.isa.us</a>.

#### SECTION I

# PURPOSE OF PROCUREMENT

As part of the Commonwealth of Massachusetts' program to purchase environmentally preferable products (EPPs) and to address certain environmental and health concerns associated with some cleaning products, it is the intent of this RFR to establish a contract for environmentally preferable cleaning products which, through meeting specific standards, represent a lesser impact to public health and the environment than competing products and which perform at or beyond the standards established by the Commonwealth.

The categories of products to be provided under this contract include:

- 1. General Purpose Cleaners
- 2. Bathroom Cleaners
- 3. Glass Cleaners

- 4. Carpet Cleaners
- 5. Disinfectants
- 6. Floor care Products
- 7. Hand Soaps

For purposes of this RFR, the minimum standards established for the performance of these products are based on the Green Seal Standard for Industrial and Institutional Cleaners (GS-37). http://www.greenseal.org/standards/industrialcleaners.htm\_wherever\_possible. Green Seal is an independent, non-profit organization that strives to achieve a healthier and cleaner environment by identifying and promoting products and services that cause less toxic pollution and waste, conserve resources and habitats, and minimize global warming and ozone depletion. Green Seal has no financial interest in the products that it certifies or recommends or in any manufacturer or company. Green Seal's evaluations are based on state-of-the-art science and information using internationally recognized methods and procedures. For more information. visit their website (http://www.greenseal.org/about.htm).

The Green Seal standard establishes environmental requirements for industrial and institutional general-purpose, bathroom, and glass cleaners. For purposes of this standard, general-purpose, bathroom, and glass cleaners are defined as those cleaners intended for routine cleaning of offices, institutions, warehouses, and industrial facilities. Due to the large number of possible cleaning products, processes, soil types, and cleaning requirements, the compatibility of cleaners with surface materials is not specifically addressed in this standard. Product users should follow the manufacturers' instructions on compatibility. Each criterion states whether it applies to the undiluted product or to the product as used.

The standard also does not focus on the use of cleaners in households, food preparation operations, or medical facilities, nor was it intended to apply to those products included in Categories 4 – 7. However, for purposes of consistency in establishing criteria for EPP cleaning products, the PMT has applied the standard to Categories 4 - 7, to the extent possible, and noted any exceptions within the RFR text. It should also be noted that the specifications for all categories in this RFR are intended to discourage the use of animal testing. (See Section X for more details and Appendix I for the GS-37 development and consensus process).

#### **Multi-State Approach**

This procurement has been designed in consultation with various state and local governments across the country for the purpose of establishing a set of minimum criteria that they and others can use in drafting their contract bids. This effort was coordinated by the Center for a New American Dream and included the participation of Massachusetts; Minnesota; Missouri; Washington; King County, Washington; Phoenix, Arizona; Santa Monica, California; Seattle, Washington; and the Pacific Northwest National Laboratory. Additional information on this working group is available from Marcia Deegler at 617 720-3356 or Scot Case at 610-373-7703.

#### **SECTION II**

#### DURATION OF CONTRACT AND CONTRACT AWARDS

Products will be acquired through a statewide contract between OSD and the Contractors for an initial term of three (3) years. The contract may be renewed at the option of the PMT for an additional six (6) years, for a total of nine (9) years. Any such extensions will be at the same terms and conditions as the initial contract with the Commonwealth unless mutually agreed upon by all parties.

Up to seven (7) Contractors will be approved for the sale of environmentally preferable cleaning products to the Commonwealth.

Approximately thirty (30) days before the expiration of any term, the PMT will notify the contractors in writing of the Commonwealth's intent to renew their contract. Contractors will be given the opportunity to adjust pricing if needed. Documentation **must** be submitted to evidence any such requests and **must** be approved by the PMT before a change goes into effect. Contractors will also be given the opportunity to add new products to the contract, subject to the approval of the PMT.

The PMT reserves the right to review and accept or reject all documentation submitted by Contractors if it is determined to be inaccurate. All contractors and their products will be evaluated during the contract term and contract(s) may be terminated at any time upon the determination by the PMT that either contractor or product performance is not satisfactory.

Additionally, the PMT reserves the right to amend the product specifications, or cancel all contracts with Contractors and re-bid an RFR for environmentally preferable cleaners if the PMT determines that new specifications should be established based on changes in technology, product development, efficacy, or other factors relevant to these products and industry.

The PMT also reserves the right to add new product categories at a later date if it is deemed the best value for the Commonwealth.

#### **SECTION III**

#### **ELIGIBLE ENTITIES**

All departments of the Commonwealth, including all constitutional offices, the legislature, and the judiciary; Cities; towns, municipalities, counties and other political subdivisions of the Commonwealth, including schools and other service districts; Authorities, commissions, institutions of higher education and quasi-public agencies, and Not for Profit organizations currently contracting with the Commonwealth to provide human and social services; and other eligible entities designated in writing by the State Purchasing Agent may use this contract.

#### **SECTION IV**

# ESTIMATED VALUE OF THE PROCUREMENT

Since the prior contract was the first time EPP Cleaning Products were presented to the Commonwealth, there is no clear estimate for upcoming anticipated expenditures.

However, the purchases for the prior contract did reach an estimated \$500,000 for the four year period and increased over the years as follows: FY99 = \$32,726, FY00 = \$89,890, FY01 = \$184,755, and FY02 = \$200,000 (est.).

The contract award, however, does not guarantee that any purchases will be made from this contract.

#### **SECTION V**

#### **DEFINITIONS**

Definitions in this section are established in the Green Seal Standard GS-37.

**Bathroom cleaners.** This category includes products used to clean hard surfaces in a bathroom such as counters, walls, floors, fixtures, basins, tubs, and tile. It includes products that are required to be registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), such as disinfectants and sanitizers, but does not include products specifically intended to clean toilet bowls.

**Carpet Cleaners.** Products used for the routine cleaning of carpets and other textile floor coverings. They should specify the appropriate maintenance method, such as extraction cleaning, shampooing, powdered absorbent, etc.

**Concentrate.** This is a product that **must** be diluted by at least eight parts by volume water (1:8 dilution ratio) prior to its intended use.

**Disinfectant.** EPA registered agents used to destroy or irreversibly inactivate infectious fungi, viruses, and bacteria, but not necessarily their spores.

**Dispensing-system concentrates.** These are products that are designed to be used in dispensing systems that cannot be practically accessed by users.

**EDTA**. This stands for ethylene diaminetetraacetic acid or ethylene dinitrilotetraacetic acid or any of its salts.

**General-purpose cleaners.** This category includes products used for routine cleaning of hard surfaces including impervious flooring such as concrete or tile. It does not include cleaners intended primarily for the removal of rust, mineral deposits, or odors. It does not include products intended primarily to strip, polish, or wax floors, and it does not include cleaners intended primarily for cleaning toilet bowls, dishes, laundry, glass, carpets, upholstery, wood, or polished surfaces. This category does not include any products required to be registered under FIFRA, such as those making claims as sterilizers, disinfectants, or sanitizers.

**Glass cleaners.** This category includes products used to clean windows, glass, and polished surfaces. This category does not include any products required to be registered under FIFRA, such as those making claims as sterilizers, disinfectants, or sanitizers.

**Ingredient.** Any constituent of a product that is intentionally added or known to be a contaminant that comprises at least 0.01% by weight of the product.

**Ozone-depleting compounds.** Any compound with an ozone-depletion potential greater than 0.01 (CFC 11 = 1).

**Product as used.** This is the most concentrated form of the product that the manufacturer recommends for a product's intended use. For example, if a manufacturer recommends a product be diluted 1:64 or 2:64 for use as a general-purpose cleaner, the product shall meet the environmental and performance requirements at a dilution of 2:64.

**Primary packaging.** This packaging is the material physically containing and coming into contact with the product, not including the cap or lid of a bottle.

**Recyclable package.** This package can be diverted from the waste stream through available processes and programs, and can be collected, processed, and returned to use in the form of raw materials or products.

**Sanitizers.** EPA registered agents used to reduce, but not necessarily eliminate microorganisms to levels considered safe by public health codes or regulations.

**Undiluted product.** This is the most concentrated form of the product produced by the manufacturer for transport outside its facility.

#### **SECTION VI**

# PRODUCT APPLICATIONS

Bidders **must** be able to provide products in Categories 1-3, which meet the Mandatory Health and Environmental Specifications in Section VII of the RFR. These Categories include:

- 1. General Purpose Cleaners
- 2. Bathroom Cleaners
- 3. Glass Cleaners

It is **desirable** for those Bidders who meet the mandatory criteria in Categories 1-3, to also offer additional products in any of the Categories 4-7. These products **must** also meet the Mandatory Health and Environmental Specifications in Sections VIII and IX. These categories include:

- 4. Carpet Cleaners
- 5. Disinfectants
- 6. Floor Care Products
- 7. Hand Soaps

#### **IMPORTANT SUBMISSION REQUIREMENTS**

For each distinct product being proposed, Bidders MUST submit the following:

<u>ATTACHMENT A-</u> "Bidder Response Cover Sheet" in which all product categories and products being proposed as part of a Bidder's Response **must** be identified.

<u>ATTACHMENT B</u> for all Mandatory Formulation Related Health and Environmental Specifications and Non-Formulation related criteria.

**ATTACHMENT C** for all Desirable Non-Formulation related criteria.

**EXCEPTION** - If the ingredients and formulations are the same for different products or applications, Bidders may use one Attachment A, B and C for multiple product submissions, as long as the response clearly identifies for which products / applications the attachments are being submitted. Otherwise, an individual Attachment for each product is required.

Bidders **must** also supply MSDS for all products to be offered. Bidders **must** also agree to respond (within a time period agreeable to both parties) to any request from the PMT to provide MSDS in multiple languages. Such languages may include Spanish, Portuguese and others yet to be determined.

It is **desirable** that Bidders submit MSDS in multiple languages automatically with their submission.

While presenting a Green Seal or other third party certification for each product will be considered proof of compliance with formulation requirements, Bidders may also submit individual lab results to demonstrate compliance.

#### **SECTION VII**

CATEGORIES 1, 2, AND 3

PRODUCT FORMULATION:

MANDATORY
HEALTH AND
ENVIRONMENTAL
SPECIFICATIONS

All Bidders **must** meet the following mandatory specifications to be eligible for an award. To respond to these mandatories, bidders **must** certify on Attachment D that all products being proposed in their response meet the mandatory specifications below. Bidders **must** fill out Attachment B and submit all required materials listed in this section. The PMT reserves the right to review the documentation and determine whether or not it is accurate and acceptable.

#### 1. TOXICITY

The *undiluted* product **must** not be toxic to humans. Dispensing system concentrates **must** be tested as used. A product is considered toxic if any of the following criteria apply: Oral lethal dose 50 (LD50)  $\leq$  2000 mg/kg

Inhalation lethal concentration (LC50) ≤ 20 mg/L

If the vapor phase concentration of the product at room temperature is less than 20 mg/L, it should be tested at its saturation concentration. If it is not toxic at this concentration, it passes the inhalation criteria.

Toxicity shall be measured on the product as a whole. Alternatively, a mixture need not be tested if existing toxicity information demonstrates that each of the ingredients complies. Ingredients that are nonvolatile do not require inhalation toxicity testing, and ingredients that are not readily absorbed through the skin do not require dermal toxicity testing. It is assumed that the toxicity of the individual component compounds are weighted and summed and that there are not synergistic effects.

The toxicity testing procedures should meet the requirements put forth by the Organization for Economic Cooperation and Development (OECD) Guidelines for Testing of Chemicals. These protocols include Acute Oral Toxicity Test (TG 401), Acute Inhalation Toxicity Test (TG 403), and Acute Dermal Toxicity Test (TG 402).

#### Required Documentation

See Group A in #13 Required Documentation.

#### 2. CARCINOGENS AND REPRODUCTIVE TOXINS

The undiluted products **must** not contain any ingredients that are carcinogens or that are known to cause reproductive toxicity, as defined by the following agencies:

Carcinogens: International Agency for Research on Cancer (IARC), National Toxicology Program (NTP), US Environmental Protection Agency, or the Occupational Health and Safety Administration (OSHA)

Reproductive Toxicity. Those chemicals listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (CA Code of Regulations, Title 22, Division 2, Subdiv. 1, Chapter 3, Sect. 1200, et seq.).

Naturally occurring elements and chlorinated organics, which may be present as a result of chlorination of the water supply, are not considered ingredients if the concentrations are below the applicable maximum contaminant levels in the National Primary Drinking Water Standards found in 40 Code of Federal Regulations (CFR) Part 141.

#### Required Documentation

See Group B in #13 Required Documentation.

**SECTION VII** 

(CONTINUED)

CATEGORIES 1, 2, & 3

PRODUCT FORMULATION:

MANDATORY
HEALTH AND
ENVIRONMENTAL
SPECIFICATIONS

#### 3. SKIN AND EYE IRRITATION

The *undiluted* product **must** not be corrosive to the skin or eyes. Dispensing-system concentrates **must** be tested as used. The undiluted cleaning product **must** not be corrosive to the skin, as tested using the Human Skin Construct systems (Liebsch et al. 2000; Fentem et al. 1998). The undiluted cleaning product **must** also not be corrosive to the eye as tested using the bovine opacity and permeability test (BCOP) (Sina et al. 1995) after a 10-minute exposure. The PMT will also accept the results of other peer-reviewed or standard in vitro or in vivo test methods demonstrating that the product mixture is not corrosive.

#### Required Documentation

See Group A in #13 Required Documentation.

#### 4. SKIN SENSITIZATION

The *undiluted* product **must** not be a skin sensitizer as tested by the OECD Guidelines for testing chemicals, Section 406. Dispensing system concentrates **must** be tested as used. The PMT shall also accept the results of other standard test methods, such as those described in Buehler (1994) or Magnusson and Kligman (1969), as proof that the product or its ingredients are not skin sensitizers.

#### Required Documentation

See Group A in #13 Required Documentation.

#### 5. COMBUSTIBILITY

The *undiluted* product **must** not be combustible. The product or 99% of by volume of the product ingredients **must** have a flashpoint above 150 F, as tested using either the Cleveland Open Cup Tester (ASTM D92-97) or a closed cup method International Standards Organization (ISO) 13736 or ISO 2719. Alternatively the product **must** not sustain a flame when tested using ASTM D 4206.

#### Required Documentation

See Group A in #13 Required Documentation.

# 6. PHOTOCHEMICAL SMOG, TROPOSPHERIC OZONE PRODUCTION, AND INDOOR AIR QUALITY

The product as used **must** not contain substances that contribute significantly to the production of photochemical smog, tropospheric ozone and poor indoor air quality. The volatile organic compound (VOC) and of the product as used shall be determined by the CA Air Resources Board Method 310 and **must** not exceed the following:

- 1% by weight for general purpose and bathroom cleaners
- · 3% by weight for glass cleaners

#### Required Documentation

See Group B in #13 Required Documentation.

Bidders **must** certify compliance with this criteria by also submitting a copy of the VOC Consumer and Commercial Product Registration and Certification Form already on file with the Massachusetts DEP.

## SECTION VII (CONTINUED)

CATEGORIES 1, 2, AND 3

PRODUCT FORMULATION:

MANDATORY
HEALTH AND
ENVIRONMENTAL
SPECIFICATIONS

#### 7. AQUATIC TOXICITY

The product as used **must** not be toxic to aquatic life. A compound is considered not toxic to aquatic life if it meets one or more of the following criteria: Acute LC50 for algae, daphnia, or fish = 100 mg/L

For purposes of demonstrating compliance with this requirement, aquatic toxicity testing is not required if sufficient aquatic toxicity data exist for each of the product's ingredients to demonstrate that the product mixture complies. Aquatic toxicity tests shall follow the appropriate protocols in ISO 7346.2 for fish and in 40 CFR 797, Subpart B for other aquatic organisms.

#### Required Documentation

See Group A in #13 Required Documentation.

#### 8. EUTROPHICATION (Nutrient Loading)

The product as used must not contain more than 0.5% by weight of total phosphorus.

#### Required Documentation

See Group B in #13 Required Documentation.

#### 9. AQUATIC BIODEGRADABILITY

Each of the organic ingredients **must** exhibit ready biodegradability in accordance with the OECD definition except for a FIFRA-registered ingredient in bathroom cleaner. However, all other ingredients in a FIFRA-registered bathroom cleaner **must** comply. Biodegradability will be measured by one of the following methods: ISO 9439 carbon dioxide evolution test, ISO 10708 (two-phase close bottle test), ISO 10707 (close bottle test), ISO 7827 (dissolved organic carbon removal). Specifically within a 28-day test, the ingredient shall meet one of the following criteria within 10 days of the time when the biodegradation first reaches 10%:

Removal of dissolved organic carbon (DOC) = >70%

Biological oxygen demand (BOD) = >60%

% of BOD theoretical oxygen demand (ThOD) = >60%

% CO2 evolution of theoretical = >60%

For organic ingredients that do not exhibit ready biodegradability in these tests, the manufacturer may demonstrate biodegradability in sewage treatment plants using the Coupled Units Test found in OECD 303A by demonstrating dissolved organic carbon (DOC) removal >90%.

Testing is not required for any ingredient for which sufficient information exists concerning its biodegradability, either in peer-reviewed literature or databases or proving that the ingredient was tested in accordance with standard test procedures.

#### Required Documentation

See Group A in #13 Required Documentation.

**SECTION VII** 

(CONTINUED)

10. CONCENTRATES

The product **must** be a concentrate, except for FIFRA-registered bathroom cleaners.

**Required Documentation** 

CATEGORIES 1, 2, & 3

PRODUCT FORMULATION:

MANDATORY HEALTH AND ENVIRONMENTAL SPECIFICATIONS See Group B in #13 Required Documentation.

#### 11. FRAGRANCES

Manufacturers **must** identify any fragrances on their MSDS. Any ingredient added to a product as a fragrance **must** follow the Code of Practice of the International Fragrance Association.

#### Required Documentation

See Group B in #13 Required Documentation.

#### 12. PROHIBITED INGREDIENTS

The product must not contain the following ingredients:

- Alkylphenol ethoxylates
- Dibutyl phthalate
- Heavy metals including arsenic, lead, cadmium, cobalt, chromium, mercury, nickel or selenium
- Ozone depleting compounds

#### Required Documentation

See Group B in #13. Required Documentation.

# SECTION VII (CONTINUED)

# CATEGORIES 1, 2, & 3

# PRODUCT FORMULATION:

MANDATORY HEALTH AND ENVIRONMENTAL SPECIFICATIONS

#### 13. REQUIRED DOCUMENTATION

#### Group A

For mandatory specifications #1 (Toxicity), #3 (Skin and Eye Irritation), #4 Skin Sensitization), #5 (Combustibility), #7 (Aquatic Toxicity), and #9 (Aquatic Biodegradability), Bidders **must** comply with at least one of the following submission requirements:

- a) Bidders may submit Green Seal certification or other independent third party verification.
- b) Alternatively, Bidders may submit company (in-house) or independent laboratory test results, including test protocols and detailed test results. To identify a list of ASTM approved laboratories go to <a href="https://www.astm.org">www.astm.org</a>.
- c) Bidders may submit information from a literature search that demonstrates compliance with the specification for each ingredient. For specification #1 (Toxicity) and #7 (Aquatic Toxicity), once toxicity data for each ingredient has been identified, Bidders should use the formula outlined in Appendix II to determine whether the product meets these specifications.

#### Group B

For mandatory specifications #2 (Carcinogens and Reproductive Toxins), #6 (Photochemical Smog, Tropospheric Ozone Production and Indoor Air Quality), #8 (Eutrophication), #10 (Concentrates), #11 (Fragrances), and #12 (Prohibited Ingredients), Bidders **must** comply with at least one of the following submission requirements:

- a) Bidders may submit Green Seal certification or other third party verification as proof that products meet the specification.
- b) Where applicable, Bidders may identify in their Response actual formulation data or information related to this specification (e.g. actual VOC level).

#### In all circumstances, Bidders must complete and sign Attachment D.

To assist bidders in reviewing and complying with these specifications, a number of web sites are listed in Appendix III of this RFR that may be useful to Bidders.

#### **SECTION VIII**

CATEGORIES 4 AND 5

PRODUCT FORMULATION

MANDATORY
HEALTH AND
ENVIRONMENTAL
SPECIFICATIONS

All Bidders **must** meet the following mandatory specifications to be eligible for award.

To respond to these mandatories, Bidders **must** certify on Attachment D that all products being proposed in their response meet the mandatory specifications below.

To be eligible to receive points for any **desirables** noted, Bidders **must** submit the required documentation.

#### Category 4 - CARPET CLEANERS (excluding spot cleaners)

#### **Mandatory**

- ? Products **must** meet the Mandatory Health and Environmental Specifications established in Section VII.
- ? Products must exhibit a VOC limit of not greater than 1%

#### **Required Documentation**

Bidders **must** submit all required documentation as outlined in Section VII #13.

#### Category 5 - DISINFECTANTS / SANITIZERS

#### **Mandatory**

- Products must meet the Mandatory Health and Environmental Specifications established in Section VII EXCEPT for the active ingredients with respect to biodegradability.
- ? Products **must** exhibit a VOC limit of not greater than 1%
- ? Products **must** be registered by the US Environmental Protection Agency

#### Required Documentation

Bidders **must** submit all required documentation as outlined in Section VII #13. Bidders **must** also submit a copy of the products EPA stamped label.

#### **SECTION IX**

#### CATEGORIES 6 AND 7

MANDATORY AND DESIRABLE HEALTH AND ENVIRONMENTAL SPECIFICATIONS

### Category 6 - FLOOR CARE PRODUCTS (3 applications)

- A. Floor Finishes
- **B. Floor Strippers**
- C. Maintenance Products

To be awarded in this category, Bidders must offer all three applications.

In addition, each application **must** be designed to work together in an environmentally preferable system of overall floor care.

Bidders **must** provide information on how each of the components works within such a floor care system. Particular attention should be paid to both the recoating and stripping processes. (e.g. Does the floor have to be stripped each time a finish is applied, or can it be deep scrubbed and recoated or just mopped and recoated?)

**SECTION IX** 

(CONTINUED)

CATEGORIES 6 AND 7

MANDATORY AND DESIRABLE HEALTH AND ENVIRONMENTAL SPECIFICATIONS

#### A) Floor Finishes

#### **Mandatory**

The products **must** be free of zinc and other heavy metals.

<u>Desirable</u> - It is desirable that the products:

- ? not contain phthalates
- ? not contain glycol ethers or ammonia

## **B) Floor Strippers**

#### **Mandatory**

The products must be free of zinc and other heavy metals.

<u>Desirable</u> - It is desirable that the products (in concentrate form):

- ? have a pH between 2.5 and 12
- ? exhibit a VOC limit of not greater than 1%
- ? not contain glycol ethers or ammonia

## C) Maintenance Products

#### Mandatory

The products **must** be free of zinc and other heavy metals.

<u>Desirable</u> - It is desirable that the products:

- ? not contain phthalates
- ? exhibit a VOC limit of not greater than 1%
- ? not contain glycol ethers and/or ammonia

#### Required Documentation

Bidders **must** submit third party certification or MSDS and the manufacturer's affidavit to demonstrate compliance. Submit Attachment D.

#### Category 7 - HAND SOAPS

#### Mandatory

The products **must not** be anti-microbial (a low level preservative is permissible, however, in order to prevent bacterial growth)

Desirable - It is desirable that products have a pH between 6 to 8.5

#### Required Documentation

Bidders **must** submit MSDS and a manufacturer's affidavit that it is not antimicrobial to demonstrate compliance. Bidders **must** also submit Attachment D.

#### **OPTIONAL CATEGORY**

#### JANITORIAL PAPER/TEXTILE SUPPLIES (Awarded Bidders Only)

Only those Bidders who are awarded under this contract to supply cleaning products may also provide paper or textile products and any related dispensing equipment for the paper products. Any such paper products **must** meet or exceed the minimum federal standards and Commonwealth of Massachusetts standards for post-consumer recycled content and **must** be unbleached or bleached without the use of chlorine (Processed Chlorine Free). Textile products (e.g. rags) **must** be made of reclaimed/recycled textiles. (See Attachment K for links to the standards mentioned above).

#### Required Documentation

Bidders **must** submit manufacturer's verification of recycled content and bleaching and submit Attachment K.

**SECTION X** 

**CATEGORIES 1-7** 

NON-PRODUCT FORMULATION:

MANDATORY AND DESIRABLE SPECIFICATIONS

This section addresses issues which are not related to product formulations. The criteria include both **mandatory and desirable specifications.** Bidders must meet the mandatory portion in order to be eligible for an award, while the desirables are optional, but may represent extra points in the evaluation process.

**Desirable** specifications are included in Attachment C. All Bidders **must** fill out and return Attachment C with their response in order to be eligible for extra credit.

#### 1. TRAINING

### **Mandatory**

The product manufacturer, their distributor, or a third party **must** offer training or training materials in the proper use of the product. These **must** include step-by-step instructions for the proper dilution, use, disposal, and the use of equipment.

#### **Desirable**

It is **desirable** that such training and support include, but not be limited to:

- on-site initial training for use of products
- ongoing training either on-site or at designated sites throughout the Commonwealth
- a phone number, preferably toll-free, which departments can call to receive instructions and assistance on product use

In responding to this section on training services offered, Bidders **must** provide the following information on Attachment F:

- description of all available training with a description of the type and scope of training to be offered in Massachusetts
- identification of the number and expertise of staff and personnel available to conduct such training
- whether a phone number for assistance is available (number should be provided in the response) and the hours during which such a number is accessible
- any other information relevant to the bidder's ability to provide substantial training and support to departments throughout the Commonwealth
- description of whether there are any costs associated with training or support and provide details on those costs. It is **desirable** that initial training and additional training during the contract term be offered at no additional cost. Any associated training costs will be paid for by the using department.

#### **Required Documentation**

Complete Attachment F and/or include a separate sheet with that information.

#### 2. PACKAGING

#### Mandatory

The primary package **must** be recyclable. Alternatively, manufacturers may provide for returning and refilling their packages.

#### <u>Desirable</u>

It is **desirable** that a Bidder's primary and/or secondary packaging be made with a percentage of post-consumer recycled material and represent a source reduction measure.

#### Required Documentation

Use Attachment G to specify packaging, recyclable materials, and any percentages of recycled content (particularly post-consumer). Include a description of any return / collections program available and identify any measures to reduce the amount of overall packaging.

#### **SECTION X**

(continued)

NON-PRODUCT FORMULATION:

MANDATORY AND DESIRABLE SPECIFICATIONS

#### 3. LABELING

#### **Mandatory**

The manufacturer's label **must** state clearly and prominently that dilution with water from the cold tap is recommended and shall state the recommended level of dilution. The manufacturer shall also include detailed instructions for proper use and disposal and for the use of personal protective equipment.

### **Desirable**

#### It is desirable that:

- ? products have color coded labels in lieu of dyes and be made with a percentage of postconsumer recycled content.
- ? Manufacturers have product-labeling systems to assist non-English speaking or illiterate personnel.

#### **Required Documentation**

Bidders **must** submit Green Seal or another third party certification to show compliance, or test results from an independent lab that demonstrate such compliance.

#### 4. DISPENSING EQUIPMENT

#### Desirable

It is **desirable** that Bidders provide an option for dispensing equipment that reduces worker exposure to chemicals and promotes the appropriate use of the cleaners.

#### Required Documentation

To receive credit, Bidders **must** provide a description of available equipment and information on the features that reduce risk and exposure.

#### 5. NON-ANIMAL TESTING

#### Desirable

It is **desirable** that Bidders products not be tested on animals. The PMT wants to discourage animal testing and will accept the results of past peer-reviewed or standard tests demonstrating compliance with a criterion. In addition, a mixture need not be tested (or retested) if existing information demonstrates that each of the ingredients complies with a criterion. The PMT may also accept non-animal (in-vitro) test results, providing that the test methods are referenced in peer-reviewed literature and the manufacturer provides the reasons for selecting the particular test method. (This section applies to Sections 4.1, 4.3, & 4.7 in the Green Seal Standard).

It is also **desirable** that manufacturers have a non-animal test policy in place, or plan to implement such a test policy in the near future.

#### Required Documentation

To receive credit, Bidders **must** submit a statement on corporate non-animal testing policies. Test results or data that do not employ animal tests will also receive credit.

#### **SECTION X**

(continued)

NON-PRODUCT FORMULATION:

MANDATORY AND DESIRABLE SPECIFICATIONS

#### 6. ADDITIONAL INFORMATION

#### Desirable

It is **desirable** that Bidders provide information as to whether their products contain ingredients that may be identified as asthma-causing agents (asthmagens). Such ingredients may include, but not be limited to:

Monoethanolamine (CAS 141-43-5)

Tall Oil or Rosin (CAS 8002-26-4)

Chlorhexidine (CAS 55-56-1)

Chloramine T (CAS 127-65-1)

Ammonium Quaternary Disinfectants (May include, but not be limited to the following CAS #s: 8001-54-5, 121—54-0, 122-18-9, 8044-71-1, 123-03-5, 122-19-0)

It is **desirable** that Bidders indicate whether any product being bid is a respiratory irritant or may aggravate existing respiratory conditions.

#### Required Documentation

Bidders should complete and return Attachment H to provide this information.

#### 7. CORPORATE ENVIRONMENTAL COMMITMENT

#### Desirable

It is **desirable** that Bidders provide information concerning environmental initiatives being conducted or planned in other company operations. Such efforts may include, but not be limited to a Bidder who has:

- instituted a publicly available corporate environmental policy that can be measured by established goals
- implemented an environmental management system such as ISO 14001
- introduced recycled and/or environmentally preferable products into other operational areas, such as using:
  - recycled-content paper that meets the federal standards for all printing and publishing needs (e.g. brochures, advertising, catalogs)
  - and attempting to promote renewable resources (e.g.bio-based products)
  - vehicle maintenance products (e.g. re-refined oil, antifreeze, retread tires) and/or alternative fuel vehicles for deliveries
  - Energy Star (energy efficient) office equipment

#### Required Documentation

Include a description of the information requested on a separate page, clearly identified, in the Bidder's Response.

#### **SECTION XI**

# PRODUCT SPECIFIC PERFORMANCE REQUIREMENTS

#### Categories 1 – 7

The product performance requirements as established by the Green Seal standard GS-37 represents the minimum performance requirements for products submitted under this RFR.

Each product as used when diluted with water from the cold tap at no more than 50 °F, must clean common soils and surfaces in its category effectively, as measured by a standard test method. Green Seal recommends the following test methods:

**Category 1 - General-purpose cleaners.** The product **must** remove at least 80% of the particulate soil in the American Society for Testing and Materials (ASTM) D4488-95, A5.

**Category 2 - Bathroom cleaners.** The product **must** remove at least 75% of the soil in ASTM D5343 as measured by ASTM D5343.

**Category 3 - Glass cleaners.** The product **must** achieve at least a rating of three in each of the following categories established by the American Chemistry Council (formerly called the Chemical Specialties Manufacturers Association - CSMA) DCC 09: soil removal, smearing, and streaking. http://www.americanchemistry.com

Using standard test methods, a manufacturer can also demonstrate that its product performs as well as a nationally recognized product in its category or achieves the removal efficiency defined in this section.

#### **SECTION XII**

#### **PRICING**

All Bidders **must** submit with their response prices for all items being bid using Attachment I "Price Sheet."

Bidders must complete all information requested on the price sheet.

All prices proposed **must** include all shipping charges. Prices which include dispensers should be identified in each Bidder's response.

For required or optional dispensing equipment, which has a separate charge, Bidders should identify the type of equipment and associated costs in a separate attachment.

#### **SECTION XIII**

EVALUATION CRITERIA AND PROCESS The Commonwealth will utilize a three-phase evaluation process to select Bidders for a contract award.

#### Phase I- Product Formulation Health and Environmental Specifications

This phase will involve an evaluation of both the Mandatory and Desirable Product Formulation Health and Environmental Specifications indicated in Sections VII, VIII, and IX. Bidder's products in Categories 1, 2, and 3 **must first** pass at least eight of the twelve mandatory specifications indicated in the RFR in order to obtain preliminary approval and qualify proceed with the evaluation process. (Compliance with the remaining four criteria will be required for all awarded contractors. See below in Phase III for details).

A Bidder's product lines will then be evaluated on the Non-Product Formulation Mandatory criteria and awarded points based on to what extent they meet the **desirable** specifications referenced in Sections X. Up to ten (10) Bidders who pass the Mandatory compliance and receive the most evaluation points for the desirable criteria will be approved to proceed with the evaluation process.

#### Phase II - Performance Surface Testing

This phase will involve a performance surface test of the products for the approved (up to 10) Bidders. These Bidders will be asked to submit product samples to the Toxics Use Reduction Institute's (TURI) Surface Solutions Laboratory at the University of Massachusetts Lowell (UML) to evaluate such performance issues as, but not limited to, cleaning effectiveness, ease of use, and odor. All training and support materials required to conduct these surface tests **must** be provided free of charge by the Bidders to the testing facility. Bidders **must** also sign Attachment D certifying that they are willing to participate in such tests and abide by the results. Product(s) which fail to meet the minimum performance criteria established by the PMT will not be approved for a contract award, nor may all Bidders selected for testing be awarded a contract.

For more info on this contact the Surface Solutions Laboratory (SSL) Manager at 978-934-3133, or the Laboratory Director at 978-934-3249. Do not send any product samples without SSL's prior authorization. The laboratory website is <a href="www.cleanersolutions.org">www.cleanersolutions.org</a>. The SSL Standard Operating Procedures for performance screening: <a href="http://www.cleanersolutions.org/Testing">http://www.cleanersolutions.org/Testing</a> Procedure.html

and the analytical techniques used for surface cleanliness inspection are found at:

and the analytical techniques used for surface cleanliness inspection are found at: <a href="http://www.cleanersolutions.org/Analytical">http://www.cleanersolutions.org/Analytical</a> Methods.html

#### Phase III - Pricing and Final Evaluation

Following the product and bidder performance evaluation, product lines shall also be evaluated based on their purchase price. Upon completion of that evaluation, the scores awarded to each Bidder's products for the **desirable** RFR specifications, surface test performance and price will be totaled to rank Bidders and their products. Up to seven (7) Bidders receiving the highest total scores will then be selected as approved Contractors for the Commonwealth for the time period(s) outlined in Section II. Evaluation points for **desirable** items will be allocated as follows:

Performance testing
 Pricing
 Training and support
 Packaging/labeling/dispensing
 Packaging/labeling/dispensing
 Packaging/labeling/dispensing
 Bidder qualifications
 Non-Animal testing
 Asthmagens Information
 TOTAL =
 100%

In cases where in Phase I of the evaluation a Bidder did not submit the required test results, or the product failed to comply with all the mandatory formulation criteria in Categories 1, 2, and 3, but were still approved for an award, these Awarded Contractors **must** be able to demonstrate such mandatory compliance with all required criteria within the next 90 days. In order to provide such evidence, if further testing of these products by TURI is required, then those

# SECTION XIII (continued)

Contractors should be prepared to offer an additional product samples and, possibly, pay a fee to have such extended testing performed.

#### EVALUATION CRITERIA AND PROCESS

The Commonwealth also intends to conduct ongoing evaluations of Contractors and their products during the contract term and terminate any contract based on unsatisfactory performance, and add additional Contractors to the contract where needed based on the tabulated scores. Additional points may be awarded to those Bidders who are certified as an MBE/WBE or who subcontract with MBEs/WBEs.

#### **SECTION XIV**

CHANGES / CLARIFICATIONS TO RESPONSES AND CONTRACTS The PMT reserves the right to request clarification(s) of any response if information appears to have been inadvertently omitted or incomplete. If the PMT requires a clarification of any particular section of a Response, all Bidders that submitted Responses will be given the same notice and opportunity for clarification of the identified section in the Response. Clarifications are explanations of what is stated in a Response and may not be used as an opportunity to submit supplemental information or a change to a Response, unless the PMT specifically requests these submissions or changes as part of the clarification of all Responses. Bidders who fail to submit as complete a response as possible may not be asked to clarify their responses and will either receive 0 points in each area where information was not submitted or may be disqualified if serious omissions occur in the mandatory section. Those bidders who knowingly misrepresent product information will be immediately disqualified during the evaluation phase or during the contract term should such misrepresentation be discovered then.

The PMT reserves the right during the contract term to add other cleaning products to the list of approved cleaning products beyond the products/applications referenced in Section VI. These additions shall be made only upon the determination by the PMT that such products fall within the scope of this RFR and have been evaluated and approved using similar standards and procedures contained in this RFR. In addition, the PMT reserves the right to delete specific products from the approved list if such products and/or contractors do not perform adequately during the contract term. The PMT also reserves the right to add contractor(s) to the contract upon the disqualification of an awarded contractor during the contract term due to inadequate performance, or any other situation which warrants such change.

The PMT also reserves the right to approve the testing agency, lab, or certification source utilized by Bidders to demonstrate their compliance with the RFR specifications.

#### **SECTION XV**

#### BIDDER QUALIFICATIONS

#### A. Years in Business

All Bidders **must** have been in business for at least two (2) years as of September 1, 2002 during which time the Bidder was active in the sale of cleaning products. Bidders **must** complete and submit Attachment E. It is **desirable** that Bidders and manufacturers have been in the business of selling and/or formulating environmentally preferable cleaning products during this time and over a longer time period. To receive points Bidders **must** submit proof (bills of sale, manufacturer information, etc.) that environmentally preferable cleaning products were sold and/or manufactured/formulated and identify the time period during which such products were available.

#### B. References

All bidders **must** submit with their response, using Attachment J, three (3) references of former or current customers of the Bidder's cleaning product(s). It is **desirable** that such references provide information about environmentally preferable products purchased from the Bidder and/or from the manufacturer who is providing products as part of this bid. A maximum of one (1) Massachusetts State Department may be used as a reference.

The PMT also reserves the right to consider historic information and fact, whether gleaned from the bidder's response or any other source, in the evaluation process.

#### **SECTION XVI**

# INSTRUCTIONS TO BIDDERS

- A. Bidders may submit written questions about this RFR in accordance with the schedule in the Procurement Calendar. Bidders may also attend the Bidders Conference referenced in the Calendar and ask questions at that time, however, attendance at the Bidders Conference is not required.
- B. Bidders **must** fill out the following forms and submit them with their response:
  - Commonwealth Standard Terms and Conditions http://www.state.ma.us/osd/phand/c tc.pdf
  - Commonwealth Standard Contract Form <a href="http://www.state.ma.us/osc/accountg/marmemos/scf2001.pdf">http://www.state.ma.us/osc/accountg/marmemos/scf2001.pdf</a>
  - Commonwealth W-9 form http://www.state.ma.us/osc/accountg/Comptroller\_forms/NewMass\_W9.pdf
  - Northern Ireland Notice and Certification <a href="http://www.state.ma.us/osd/phand/nirel.pdf">http://www.state.ma.us/osd/phand/nirel.pdf</a>
  - Contractor Authorized Signature Form http://www.state.ma.us/osd/phand/signver.pdf
  - Affirmative Action Form <a href="http://www.state.ma.us/osd/phand/aaplan.pdf">http://www.state.ma.us/osd/phand/aaplan.pdf</a>

(these forms are available on the Forms & Information section of Comm-PASS)

- C. To be eligible for award, Bidders **must** meet all mandatory specifications and **must** sign the letter of certification included in this RFR (Attachment D). Mandatory items throughout this RFR are designated by the word "**must**."
- D. Bidders **must** submit all required information identified in the mandatory section (Attachment B) or bidders may be disqualified.
- E. Bidders may be eligible to receive points for non-mandatory items. These are designated throughout the RFR by the word "desirable." To receive desirable points, Bidders must submit all the information required for eligibility in order to be awarded these points. Any response which is left blank or for which no or inadequate information is submitted will receive 0 points for that item.
- F. Bidders **must** submit separate Mandatory and Desirable Specifications Attachments (Attachments B & C) for each product application being submitted for consideration by the PMT. However, bidders may submit a single Attachment for multiple product applications if there is no information which differs. If a bidder submits a single attachment for multiple product applications, it **must** clearly identify that it is doing so as well as clearly list the product applications for which the attachments are being submitted.
- G. Bidders **must** fill out and submit Attachments A through L and all other required documentation with their response. The RFR text and appendices are for the Bidders' information only and should not be included with responses.
- H. Bidders must submit Material Data Safety Sheets (MSDS) for all products being proposed as part of this RFR. See Section VI for conditions concerning MSDS in multiple languages.

#### **SECTION XVII**

INSTRUCTIONS FOR SUBMISSION OF RESPONSES Bidders **must** submit one (1) original and three paper (3) copies of their response to:

Tasha Coleman

Procurement Team Leader for Food and Groceries

Operational Services Division

1 Ashburton Pl., Rm. 1017

Boston, MA 02108

Bidders should mark on the envelope "RFR # GRO16.

Faxed or email responses will not be accepted.

In an effort to promote greater use of recycled and environmentally preferable products and minimize waste, all bids submitted should comply with the following guidelines:

- All copies should be printed double sided.
- All submittals and copies should be printed on recycled paper with a minimum postconsumer content of 30% or on tree-free paper (i.e. paper made from raw materials other than trees, such as kenaf). All bids should note the level of recycled content contained in the paper being used.
- Unless absolutely necessary, all bids and copies should minimize or eliminate use of non-recyclable or non re-usable materials such as plastic report covers, plastic dividers, vinyl sleeves and GBC binding. Three-ringed binders, glued materials, paper clips and staples are acceptable.
- Bidders should submit materials in a format which allows for easy removal and recycling of paper materials.
- Bidders are encouraged to use other products which contain recycled content in their bid documents. Such products may include, but are not limited to, folders, binders, paper clips, diskettes, envelopes, boxes, etc. Where appropriate, bidders may wish to note which products in their bids are made with recycled materials.
- Unnecessary samples, attachments or documents not specifically asked for should not be submitted.

In an effort to organize the various forms of documentation required for this Response, Bidders are encouraged to use paper dividers or another similar method to clearly identify the individual sections of information.

### **ATTACHMENT A**

## **BIDDER COVER SHEET AND PRODUCT INFORMATION**

Bidders **must** check off the product applications being bid as part of this response.

All bidders **must fill out separate** Mandatory and Desirable Specification checklists (Attachments B and C ) for each application being bid.

If all mandatory and desirable specifications are the same for different applications, bidders may use the same attachment. However, bidders **must** note on that attachment the specific product applications, which apply to the specifications being submitted.

# THIS ATTACHMENT SHALL BE SUBMITTED AS THE COVER SHEET TO A BIDDER'S RESPONSE.

All Bidders <b>must</b> fill out the for part of this response.	llowing information, including	any manufacturers who will be pr	oviding products a
Bidder Name:			
Contact Name:			
Bidder Address			
City	State	Zip Code	
Phone	Fax	email	
Manufacturer Name #1			
Manufacturer Name #2			
Manufacturer Name #3			
Bidders <b>must</b> check the applica <b>Mandatory Categories</b> :	ations below, which are being	proposed as part of their response	
General Purpose Cleaners	☐ Bathroom Cleaners	☐ Glass Cleaners	
Desirable / Optional Categor	ies:		
☐ Carpet Cleaners ☐ Disir	nfectants	oducts	

### ATTACHMENT B / CHECKLIST

# MANDATORY FORMULATION RELATED HEALTH AND ENVIRONMENTAL SPECIFICATIONS AND NON-FORMULATION RELATED

This attachment **must** be filled out and returned with all responses. Bidders **must** also submit required documentation to be considered eligible for award. Separate attachments **must** be submitted for each product application when environmental and health information varies for each application. (This form applies to mandatory specifications in Sections VII, VIII and IX).

Bidder Name

Manufacturer Name				
Product Name				
Product Application Being Proposed				
CRITERIA FORMULATION RELATED SPECIFICATIONS  Categories 1, 2, and 3 (mandatory)	IS REQUIRED DOCUMENTATION ATTACHED?	TYPE OF DOCUMENTATION SUBMITTED (e.g. 3 <sup>rd</sup> Party certification, independent lab results, literature search, MSDS)		
Categories 4 and 5 (if applicable)  1. Toxicity	☐Yes ☐No	, , , , , , , , , , , , , , , , , , , ,		
Carcinogens and Reproductive Toxins	☐Yes ☐No			
Skin and Eye Irritation	☐Yes ☐No			
4. Skin Sensitization	☐Yes ☐No			
5. Combustibility	☐Yes ☐No			
Photochemical Smog, Troposheric Ozone     Production and Indoor Air Quality	□Yes □No			
7. Aquatic Toxicity	□Yes □No			
8. Eutrophication	□Yes □No			
9. Aquatic Biodegradability	□Yes □No			
10. Concentrates	□Yes □No			
11. Fragrances	☐Yes ☐No			
12. Prohibited Ingredients	☐Yes ☐No			
CRITERIA NON-Formulation Related Specifications	IS REQUIRED DOCUMENTATION ATTACHED? Categories 1, 2, and 3	IS REQUIRED DOCUMENTATION ATTACHED? Categories 4-7 (if any)		
Training	☐Yes ☐No	□Yes □No		
Packaging	□Yes □No	□Yes □No		
Labeling	□Yes □No	□Yes □No		
I have submitted data to demonstrate compliance with the following: (CHECK ONE)  All twelve (12) mandatory health and environmental product specifications listed in Section XII.  Eight (8) or more mandatory health and environmental product specifications listed in Section XII and if awarded a contract, I agree to comply with the remaining mandatory specifications and provide the required documentation within the time period specified in the RFR.				

# ATTACHMENT C / CHECKLIST DESIRABLE PRODUCT SPECIFICATIONS

To be eligible for points in this section, Bidders **must** fill out and return this attachment with their response. Additionally, bidders **must** submit required documentation, which certifies compliance with the appropriate specifications to receive points. If no answer is filled out, or if no required information is submitted, bidders will receive zero (0) points for that item. The Massachusetts preference is designed to provide guidance to bidders and to inform them of the standard which will receive the greatest number of points. However, those responses which do not meet the preference may be eligible for points. Therefore, bidders are encouraged to fill out all questions even if products do not meet the preferred specification.

All responses **must** be given for products and their ingredients in their delivered form unless otherwise noted. Separate attachments **must** be submitted for product applications when environmental and health information varies for each application.

Bidder Name

Manufacturer Name	
Product Name	
Product Application(s) Being Proposed	
DESIRABLE CRITERIA (Cats. 1-7) (NON-Formulation) Specifications	IS REQUIRED DOCUMENTATION ATTACHED?
Training	□Yes □No
Packaging	□Yes □No
Labeling	□Yes □No
Dispensing Equipment	□Yes □No
Non-Animal Testing Data / Policy	□Yes □No
Asthmagen Data	□Yes □No
Environmental Commitment (specific data)	☐ Yes ☐ No
Environmental Commitment (specific data)  DESIRABLE CRITERIA  Categories 4-7 Specifications	☐ Yes ☐ No  IS REQUIRED DOCUMENTATION  ATTACHED?
DESIRABLE CRITERIA	IS REQUIRED DOCUMENTATION
DESIRABLE CRITERIA Categories 4-7 Specifications	IS REQUIRED DOCUMENTATION ATTACHED?
DESIRABLE CRITERIA Categories 4-7 Specifications Floor Finishers – no phthalates	IS REQUIRED DOCUMENTATION ATTACHED?  Yes No
DESIRABLE CRITERIA Categories 4-7 Specifications Floor Finishers – no phthalates Floor Finishers – no glycol ethers or ammonia	IS REQUIRED DOCUMENTATION ATTACHED?  Yes No No
DESIRABLE CRITERIA Categories 4-7 Specifications  Floor Finishers – no phthalates  Floor Finishers – no glycol ethers or ammonia  Floor Strippers – pH between 2.5 and 12	IS REQUIRED DOCUMENTATION ATTACHED?  Yes No Yes No Yes No
DESIRABLE CRITERIA Categories 4-7 Specifications  Floor Finishers – no phthalates  Floor Finishers – no glycol ethers or ammonia  Floor Strippers – pH between 2.5 and 12  Floor Strippers – VOC limit not greater than 1%	IS REQUIRED DOCUMENTATION ATTACHED?  Yes No Yes No Yes No Yes No
DESIRABLE CRITERIA Categories 4-7 Specifications  Floor Finishers – no phthalates  Floor Finishers – no glycol ethers or ammonia  Floor Strippers – pH between 2.5 and 12  Floor Strippers – VOC limit not greater than 1%  Floor Strippers - no glycol ethers or ammonia	IS REQUIRED DOCUMENTATION ATTACHED?  Yes No Yes No Yes No Yes No Yes No Yes No
DESIRABLE CRITERIA Categories 4-7 Specifications  Floor Finishers – no phthalates  Floor Finishers – no glycol ethers or ammonia  Floor Strippers – pH between 2.5 and 12  Floor Strippers – VOC limit not greater than 1%  Floor Strippers - no glycol ethers or ammonia  Maintenance Products - no phthalates	IS REQUIRED DOCUMENTATION ATTACHED?  Yes No

# ATTACHMENT D BIDDER CERTIFICATION LETTER

- 1. This Attachment **must** be signed and submitted with each response.
- 2. Both Bidder and manufacturer must sign this attachment if they are different entities.
- 3. Only one letter **must** be submitted by each Bidder.

I/we, do hereby declare that all specifications in this RFR and all ingredients in all proposed products have been reviewed and that all products meet the mandatory requirements contained in Section XI (and Section XII if Bidder offers products in any of those categories) and Attachment B, and that all information provided in this bid response is accurate and true.

I/we also understand that, should a determination be made that knowingly false information has been submitted and/or omitted as part of this response, it will result in the immediate disqualification of said response. Additionally, any knowingly false information submitted may result in other penalties associated with doing business with the Commonwealth of Massachusetts, including, but not limited to, disqualification from bidding on future contracts of a similar nature, disqualification from bidding on any contracts, and/or appropriate legal action.

In addition, should I/we be selected to participate in a field test of cleaning products with test products to be purchased by OSD as described in Section VI of this RFR, I/we hereby agree to participate fully.

For the Bidder:	For the Manufacturer/Formulator:
Signature	Signature
Print Name/Title	Print Name/Title
Date	Date
· · · · · · · · · · · · · · · · · · ·	sponses, please list the name and phone number of one or eing bid and who may be contacted for additional information.
Phone Number(s):	

# ATTACHMENT E BIDDER QUALIFICATIONS

Bidders must fill out this attachment - see Section VIII for specific requirements and desirables.

Bidder Name	
Manufacturer Name	
Bidder has been in business selling cleaning products for years (minimum of 3 years)	
Bidder has been involved with the sale of environmentally preferable cleaning products for  (desirable that bidder has experience with such products).	years
Bidder has submitted proof of such experience:yesnono	
<ul> <li>Manufacturer/formulator of products being proposed has been manufacturing such products has foryears (desirable that manufacturer has experience in the formulation of such pr least two (2) years).</li> </ul>	-
Bidder has submitted proof of such manufacturer experience:yesnonono	

### ATTACHMENT F

## TRAINING INFORMATION

If Bidders offer training services, this attachment (or an attached text page with the information and clearly identified as *Training Information*) **must** be filled out and returned with their response to receive points. If this attachment and/or information is not included or is left blank, Bidders will receive 0 points for this section.

Bic	lder Name:	
Со	ntact:	
Ph	one:	
1.	Describe training services available, including, but not limited to, training goals, training methods and types of training proposed for Commonwealth agencies (use additional paper if necessary).	proposed,
	Provide a list of personnel who would be available to conduct training for Commonwealth Departr prior experience in conducting training.  Experience	
3.	Provide a phone number for questions and the hours that calls will be answered.	
	one:Hours:	
4. —–	Describe costs associated with different types of training, if any.	
5.	Provide any other information relevant to training services offered by the Bidder.	

## **ATTACHMENT G**

## **PACKAGING INFORMATION**

## 1. Recyclable and Recycled Content Packaging

Packaging Type/Material

To receive points, Bidders **must** list the type of packaging used, the material used and the total and post-consumer recycled content in such packaging.

**Total Recycled** 

**Post-Consumer** 

1.	Content (%)	Content (%)
11		
2.		
3.		
1.		
5.		
5.		
7.		
3.		
· · ·	d use.	
f available, provide a description of how containers may	be refilled and/or a description	of any packaging retu
If available, provide a description of how containers may	be refilled and/or a description	of any packaging retu
If available, provide a description of how containers may	be refilled and/or a description	of any packaging retu
If available, provide a description of how containers may	be refilled and/or a description	of any packaging retu
3. Refillable/Returnable Containers  If available, provide a description of how containers may program currently in place or proposed for establishmen	be refilled and/or a description	of any packaging retu

# ATTACHMENT H ADDITIONAL INFORMATION / ASTHMAGENS

Bidders **must** list all products they are offering and indicate by circling the appropriate response as to whether they contain an asthma-causing agent, or represent a respiratory irritant, or may aggravate existing respiratory conditions.

If none of the products being offered represents these issues, check the box at the bottom. \*

PRODUCT NAME	Monoe Olan CAS 14	nine	Tall or Ro CAS 800	osin	Chlorhe CAS 5		Chlorar CAS 12		Ammo Quate Disinfe	rnary	Respii Irritar Aggra	nt or
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

\*We certify that all of the products being offered in this Response DO NOT contain any of the asthmacausing agents listed above, or represent a respiratory irritant.

dubing agonto notou abovo, or reprocent a respiratory inflanti		
	Check here:	?
(Otherwise, products must be listed individually and the Response boxes circled according	ly).	
BIDDER NAME:		
DATE:		

# ATTACHMENT I PRICE SHEET

Bidders **must** fill out the Cost Proposal and submit it with their response marked with the words:

- (Bidder Name)
- GRO16
- "Price Sheet"

Use a separate attachment if necessary.

Product/Application Package Sizes Available (e.g. 1 gallon, 4 gallon case, etc.)		Cost per unit (e.g. \$20 per case, etc.)	Recommended Dilution Level (light soils) from product label
e.g. glass cleaner	1. 1 gallon concentrated	\$ 40.00	10:1
	2. quarts ready to use	\$ 2.50	none
1.	1. 2.	\$	
2.	1.	\$	
3.	2. 1.	\$	
	2.	\$	
4.	1. 2.	\$	
5.	1.	\$	
0.	2.	\$	
6.	1.	\$	
	2.	\$	
7.	1. 2.	\$	
8.	1.	\$	
0.	2.	\$	
9.	1.	\$	
	2.	\$	
10.	1.	\$	
11.	2. 1.	\$	
11.	2.	\$	
12.	1.	\$	
	2.	\$	
13.	1.	\$	
44	2.	\$	
14.	1. 2.	\$	
15.	1.	\$	
13.	2.	\$	
16.	1.	\$	
	2.	\$	
17.	1.	\$	
10	2.	\$	
18.	1.	\$	
19.	2. 1.	\$	
17.	2.	\$	
20.	1.	\$	
	2.	\$	

# ATTACHMENT J BUSINESS REFERENCE FORM

Bidder:	
RFR Name/Title: Cleaning Products, Environmentally Preferable	
RFR Number: # GRO16	
The Bidder <b>must</b> provide three (3) business references as per Se	ection X.B.
Reference Name:	Contact:
Address:	Phone: # ( )
Fax/	Internet address:
Description and date(s) of commodities and services provided: _	
Reference Name:	Contact:
Address:	Phone: # ( )
Fax/	Internet address:
Description and date(s) of commodities and services provided: _	
Reference Name:	Contact:
Address:	Phone: # ( )
Fax/	Internet address:
Description and date(s) of commodities and services provided: _	

References will be contacted to confirm the Bidder's abilities and qualifications as stated in the Bidder's Response. References from the Procuring Department shall not be accepted for references. The Department may deem the Bidder's Response un-responsive if a reference is not obtainable from a listed reference after reasonable attempts.

# ATTACHMENT K OPTIONAL CATEGORY

(Awarded Bidders Only)

## Optional Janitorial Paper / Textile Products, Recycled

Only those Bidders who are awarded under this contract to supply cleaning products may also provide paper or textile products and any related dispensing equipment for the paper products.

- Any such paper products must meet exceed the minimum federal standards of (http://www.epa.gov/cpg/products/tissue.htm) and Commonwealth Massachusetts standards (http://www.state.ma.us/osd/phand/epp.pdf) for post-consumer recycled content and must be unbleached or (Processed bleached without the use of chlorine Chlorine Free). (http://www.chlorinefreeproducts.org/cert standards/2001PC%7E1.PDF - See the Chlorine Free Products Association page for information on the process).
- ? Textile products (e.g. rags) **must** be made of reclaimed/recycled textiles.

Product Description	Brand Name	Manufacturer Name	% Post- Consumer Recycled Content	% Total Recycled Content

Bidder Name:		
DIOCEL MAINE.		

#### APPENDIX I

# **GS-37 Development and Consensus Process**

The Aberdeen / Green Seal Environmental Standard for Industrial and Institutional Cleaners, GS-37 was set by a Stakeholders Committee balanced among manufacturers, users, government, environmentalists, and academics and consultants. The Stakeholders Committee first set the scope of the standard. Green Seal then studied the category and drafted a standard. The Stakeholders Committee discussed the draft standard at great length and in many sessions. The standard was revised many times, sent for public review to 125 experts, and posted for comment on Green Seal's website. A Response document responding to the comments was prepared for the Stakeholders Committee and was reviewed and discussed by the committee. The standard was revised still further until consensus was reached.

The procedure produced a life-cycle, consensus standard that meets the requirements of ISO 14020 and 14024, EPA's Criteria for Third Party Certifiers, the Federal Office of Management and Budget's regulation, and the criteria of the Global Ecolabeling Network (GEN). The standard uses widely accepted tests, has a performance requirement, and is completely transparent. The standard is the only cleaners standard recommended for consideration by the U.S. Environmental Protection Agency (see EPA's EPP website).

#### APPENDIX II

#### **Evaluation of Toxicity Data**

Green Seal will evaluate the toxicity of a product if toxicity data for each of the product ingredients exists. The toxicity values are adjusted by the weight of the ingredient in the product and summed using the following formula:

$$TP = \left(\sum_{i=1}^{n} \frac{wt_i}{TV_i}\right)^{-1}$$

Where.

TP = toxicity of the product

wt<sub>i</sub> = the weight fraction of the ingredient

TV = the toxicity value for each ingredient (LD<sub>50</sub>, LC<sub>50</sub>)

n = number of ingredients

For example, a product containing 5% alkylpolyglycoside, 10% sodium silicate, and 85% water would be compared to the oral toxicity cutoff criterion using:

$$TP = \left(\frac{0.05}{5,000} + \frac{0.1}{1,280}\right)^{-1}$$

chemical	LD <sub>50</sub> (oral) <sup>1</sup>	wt %	LD <sub>50</sub> (oral)	
	mg/kg		mg/kg	
alkylpolyglycoside	>5,000	5	100,000 <sup>2</sup>	
sodium silicate	1,280	10	12,800	
TP			11,300	

<sup>1</sup> Toxicity data from Appendix B.

The cutoff criterion is 2,000 mg/kg, and the toxicity of the product is 11,300 mg/kg. Therefore, the example product complies with the oral toxicity criterion.

#### **Exemptions from toxicity testing**

Inhalation toxicity will not be required for any compound with a vapor pressure of 1 mmHg or less.

If inhalation test data are not available, an inhalation LC<sub>50</sub> may be estimated using the following formula.

$$LC_{50} = \frac{LD_{50,oral} \times ABS_{GI} \times BW}{ABS_{inh} \times R \times ET \times CF}$$

Where,

 $LD_{50,\text{oral}}$  = the single dose  $LD_{50}$  for the oral pathway (mg/kg)

 $ABS_{GI}$  = the gastrointestinal absorption rate, (unitless)

 $ABS_{inh}$  = the inhalation absorption rate, (unitless)

R = the respiration rate for the experimental animal (L/min)

ET = the exposure time (hours)

CF = the conversion factor (60 min/hr)

BW = the body weight of animal (kg)

If data are not available, Green Seal will use the EPA Region IV recommended gastrointestinal absorption factor of 0.8 for VOCs and 0.5 for semivolatile organic compounds. Green Seal will use an inhalation absorption rate of 1.0 for all organic compounds. The average weight of a rat is 0.35 kg and its respiration rate is 0.14 L/min. The exposure period is 4 hours.

In order to perform this estimate, the LD<sub>50</sub> value **must** be based on a single dose.

<sup>2</sup> Assumed an LD<sub>50</sub> of 5,000 for purposes of the example.

# APPENDIX III Informational Web Links

Below are lists of web sites that may be useful for Bidders in responding to the documentation requirements outlined in Section VII, #13.

#### Group A - Related Sites:

American Society for Testing and Materials (ASTM) Approved Laboratories <a href="http://astm.365media.com/astm/labs/index.html">http://astm.365media.com/astm/labs/index.html</a>

Organization for Economic Co-operation and Development <a href="https://www.oecd.org">www.oecd.org</a>

Searching the site or the online bookshop for "OECD Guidelines for the Testing of Chemicals" will get them options for obtaining either electronic or hard copies of the protocols.

### **Group B Related Sites:**

### Link to list of Carcinogens

International Agency for Research on Cancer (IARC) <a href="http://www.iarc.fr/">http://www.iarc.fr/</a>

National Toxicology Program 9th Report on Carcinogens <a href="http://ehp.niehs.nih.gov/roc/toc9.html">http://ehp.niehs.nih.gov/roc/toc9.html</a>

Occupational Safety & Health Administration Safety and Health Topics: Carcinogens http://www.osha-slc.gov/SLTC/carcinogens/

California Safe Drinking Water and Toxic Enforcement Act of 1986 aka Proposition 65 <a href="http://www.oehha.ca.gov/prop65.html">http://www.oehha.ca.gov/prop65.html</a>

EPA's list

http://www.epa.gov/pesticides/carlist/